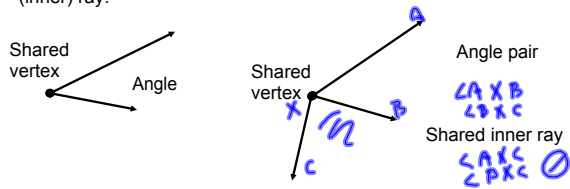


Angles and Angle Pairs

An angle, as we have been discussing, is composed of two rays with a common vertex.

An **angle pair** is when two angles share a vertex and a common (inner) ray:

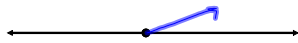


Angle pairs have no common interior points.

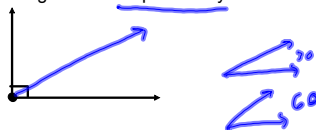
Aug 25-2:07 PM

An angle pair that has outer rays that form a straight line is called a **linear pair**.

These pairs always add up to 180 degrees.



An angle pair that forms a 90 degree angle is called a **complementary pair** and the angles are complementary angles.



Aug 25-2:13 PM

Vocabulary

Acute angle: less than 90 degrees.

Right angle: 90 degrees.

Obtuse angle: greater than 90 degrees.

Straight angle: 180 degrees (also referred to as "linear")

Adjacent angle: share an (inner) ray; no common interior points.

Aug 26-7:00 AM

Vocabulary

Complementary angles: add up to 90 degrees (they do not have to be adjacent).

Supplementary angles: add up to 180 degrees (they do not have to be adjacent).

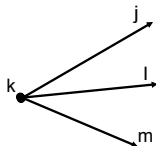
Vertical angles: formed by intersecting lines; opposite angles are congruent.

Congruent angles: have the same measurement.

Aug 26-7:00 AM

Adding angles

If you have two adjacent angles you can combine them into a larger angle:

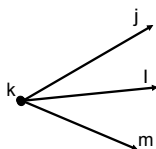


Angle jkl and angle lkm are adjacent. We can treat the combined angle, jkm , as one angle equal to the measure of both combined.

Aug 26-7:06 AM

Naming angles

When naming angles the letter of the vertex MUST be in the middle of the three letters used to name the angle.



So in the above I can refer to angle jkl , as k is the letter for the vertex. I cannot use "angle jk " because l is not a vertex. When we use single letters or numbers it should be when their use is unambiguous.

Aug 26-7:42 AM